

Technical data VHC

Technical data		VHC 2 - XTS	VHC 2 - XTS50	VHC 3 - XTS		VHC 3 - XTS50	VHC 50 - XTS
Working area							
X-traverse range vertical	[mm]	1760 - 9000	1760 - 9000	1760 - 9000	[mm]	1760 - 9000	2000 - 9000
Optional pendulum travel vertical	[mm]	(X-axis - 400) / 2	(X-axis - 500) / 2	(X-axis - 500) / 2	[mm]	(X-axis - 500) / 2	(X-axis - 600) / 2
Y-traverse range horizontal / vertical	[mm]	600	600	700 (900,1000, 1100) ²	[mm]	700 (900, 1000, 1100) ²	1000 (1250)
Z-traverse range horizontal / vertical	[mm]	850 / 820	850 / 790	850 (950, 1200) ²	[mm]	850 / 790 (950 / 890, 1200 / 1140)	1000 / 970 (1250 / 1220)
Distance table - spindle nozzle vert.	[mm]	0 - 820	0 - 790	40 - 890 (990) ²	[mm]	0 - 790 (0 - 890, 0 - 1140)	0 - 970
Distance table - spindle nozzle hor.	[mm]	180 - 1030	250 - 1100	250 - 1100 (1200) ²	[mm]	250 - 1100	280 - 1280
Machine table							
Clamping surface, grinded, approx.	[mm]	(X-axis + 400)x Y-axis	(X-axis + 400)x Y-axis	(X-axis + 400)x Y-axis	[mm]	(X-axis + 400)x Y-axis	(X-axis + 400)x Y-axis
T-slots, reference slot H7	[mm]	14 H9	18 H9	14 H9	[mm]	18 H9	18 H9
T-slots indexing	[mm]	160	160	160	[mm]	160	160
Number of T-slots		4	4	5 (6) ²		5 (6) ²	6
Max. table load	[kg/m ²]	1000	1000	1200	[kg/m ²]	1200	1500
Feed drive							
Max. rapid traverse	[m/min]	40/40/30	40/40/30	40/40/30	[m/min]	40/40/30	30/30/25
Max. feed force	[N]	9000	9000	9000	[N]	9000	20000
Main spindle drive							
Standard drive no. ¹		110	131	110		131	161
Optional drive no. ¹		100, 111, 113	133	100, 111, 113		133	163, 182
Tool holding fixture							
DIN ISO 7388-1 AD / DIN ISO 7388-3 AD		SK 40	SK 50	SK 40		SK 50	SK 50
Optional		BT 40, HSK A63, C6	BT 50, HSK A100, C8	BT 40, HSK A63, C6		BT 50, HSK A100, C8	BT 50, HSK A100, C8
Tilting spindle head							
Swivelling range B-axis		± 90° (± 100°) ²	± 90° (± 100°) ²	± 90° (± 100°) ²		± 90° (± 100°) ²	± 90° (± 100°) ²
Indexing		0,001° (fully interpolating) ²	0,001° (fully interpolating) ²	0,001° (fully interpolating) ²		0,001° (fully interpolating) ²	0,001° (fully interpolating) ²
Tool changer							
Number of tool pockets standard		22	26	22		26	30
Optional expandable up to		216 ³	156 ³	288 ³		180 ³	180 ³
Max. tool diameter	[mm]	85	110	85	[mm]	110	110
By free adjacent pockets	[mm]	135	180	135	[mm]	180	180
Max. tool length	[mm]	400	400	400	[mm]	400	400
Tool change time approx.	[s]	5	7	6	[s]	7	8
Accuracy							
Positioning accuracy ⁴	[mm]	± 0,015 (± 0,0075) ²	± 0,015 (± 0,0075) ²	± 0,015 (± 0,0075) ²	[mm]	± 0,015 (± 0,0075) ²	± 0,015
Repeating accuracy	[mm]	± 0,005	± 0,005	± 0,005	[mm]	± 0,005	± 0,005

¹ Main spindle drives

		100	110	111	113		131	133	161	163	182
Speed range	[rpm]	6000	6000	6000	6000	[rpm]	4000	4000	4000	4000	4000
Optional up to	[rpm]	15000	12000	12000	10000	[rpm]	9000	9000	7500	7500	-
Max. torque (40% DC)	[Nm]	95	143	191	255	[Nm]	286	355	540	540	820
Max. power (40% DC)	[kW]	20	30	40	40	[kW]	45	56	28	56	81

² Optional features

³ e.g. 3 fully equipped towers

⁴ Per 1000 mm per axis X/Y/Z with vertical spindle